

1046-42-934

Kabe Moen, Carlos Pérez and **Rodolfo H. Torres*** (torres@math.ku.edu). *Sharp weighted bounds for fractional operators.*

We examine the relationship between the $A_{p,q}$ constant of a weight w and the operator norms of some classical operators from $L^p(w^p)$ to $L^q(w^q)$. We obtain sharp bounds for the fractional integral operator I_α and associated fractional maximal function M_α . As an application we consider a sharp Poincaré-type inequality. (Received September 12, 2008)